BHARATI VIDYAPEETH (DEEMED TO BE UNIVERSITY), PUNE, INDIA PhD Entrance Test – 2023

SECTION-II: Medical Pharmacology - 50 Marks

- 1) **General pharmacology** Basic concepts of Pharmacokinetics, Pharmacodynamics and new drug development
- Details of Essential drugs, Pharmacovigilance, Pharmacoepidemiology, Pharmacogenetics, Pharmacoeconomics, Gene Therapy, Therapeutic drug monitoring, Drug interactions
- 2) Autonomic nervous system- Neurotransmitters, Pharmacology of drugs acting on Adrenergic and Cholinergic system, Recent advances in the treatment of Glaucoma and Benign prostatic hypertrophy, Pheochromocytoma, Migraine. Recent advances in B blockers
- 3) Central nervous system- Neurotransmitters, neuromodulators. Drugs for epilepsy, Parkinsonism, Mental illnesses, Analgesia, Anaesthesia, Skeletal muscle relaxation. Recent advances in the treatment of Alzheimer's, Epilepsy, Rheumatoid arthritis, Gout, Anesthesia. Management of pain
- **4) Endocrine system-** Drugs effective in thyroid disturbances, Diabetes mellitus. Basic pharmacology of corticosteroids, contraceptive agents and oxytocics. Recent advances in Osteoporosis, DM and infertility
- 5) Cardiovascular system- Drugs for Hypertension, Angina, Congestive cardiac failure, Hyperlipidemia, Shock, Arrhythmias with recent advances. Drugs effective in coagulation disorders and anemia with recent advances.
- **Respiratory system-** Drugs useful in treatment of Bronchial asthma and cough
- 7) **Drugs acting on Kidney-** Pharmacology of Diuretic agents and antidiuretic agents
- 8) **Antimicrobial agents-** Pharmacology of Individual groups of antimicrobial agents. National policies for Treatment of tuberculosis, leprosy, malaria, HIV infection. Drugs for amoebiasis, fungal infections and helminthic infestations
- 9) Anticancer agents and Immunomodulators
- 10) Gastrointestinal system- Drugs effective for motility disorders and Peptic ulcer